SUMMARY OF THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Cancelled)

2. (Previously Presented) A system for sealing a puncture that passes through a patient's skin and through a wall of a lumen of an artery or vein of the patient, the system comprising:

an occlusive element adapted to seal the lumen wall, so as to seal the lumen from the puncture;

a delivery device comprising first and second inlet ports in fluid communication with a delivery conduit, the delivery conduit in fluid communication with an outlet port adapted to allow flowable materials introduced through the first and second inlet ports to exit the delivery device, the delivery conduit including a mixing chamber positioned so that flowable materials introduced through the first and second inlet ports are mixed prior to exiting the delivery device;

a first container adapted for selective fluid communication with the first inlet port; and

a second container adapted for selective fluid communication with the second inlet port.

3. (Previously Presented) The system of claim 2, wherein the occlusive element is coupled to the delivery device.

4. (Previously Presented) The system of claim 2, wherein the occlusive element is a balloon.

5. (Previously Presented) The system of claim 2, wherein the first and second containers are removably attachable to the delivery device.

6. (Previously Presented) The system of claim 2, wherein the first and second containers hold a respective flowable preparation of a material chosen from the group consisting of a prepolymer, a macromer, and a monomer.

7. (Previously Presented) The system of claim 6, the first and second containers holding respective first and second prepolymers, the first and second prepolymers being crosslinkable with each other upon mixing to form a crosslinked structure.

8. (Previously Presented) The system of claim 7, the first prepolymer comprising at least two functional groups chosen from the group consisting of amines and thiols, and the second prepolymer comprising polyethylene glycol and having covalent bonding means for covalently bonding to the functional groups of the first prepolymer.

9. (Previously Presented) A system for sealing a puncture that passes through a patient's skin and through a wall of a lumen of an artery or vein of the patient, the system comprising:

means for sealing the lumen wall so as to seal the lumen from the puncture;

means for holding a first flowable material;

means for holding a second flowable material;

means for delivering the first and the second materials into the puncture when the means for sealing has sealed off the lumen, the delivery means causing a mixing of the first and second materials prior to their delivery into the puncture, the first and second materials being crosslinkable with each other upon mixing to form a crosslinked structure.

10. (Previously Presented) A kit for sealing a puncture that passes through a patient's skin and through a wall of a lumen of an artery or vein of the patient, the kit comprising:

an occlusive element adapted to seal the lumen wall so that the lumen is sealed off from the puncture;

a delivery device comprising first and second inlet ports fluidly connected to a delivery conduit, the delivery conduit in fluid communication with an outlet port adapted to allow flowable materials introduced through the first and second inlet ports to exit the delivery device, the delivery conduit including a mixing chamber such that flowable materials introduced through the first and second inlet ports are mixed together prior to exiting the delivery device;

a first container holding a first material, the first container removably attachable to the delivery device such that the contents of the first container may enter through the first inlet port; and

a second container holding a second material, the second container removably attachable to the delivery device such that the contents of the second container may enter through the second inlet port, the first and second materials being crosslinkable with each other when mixed to form a crosslinked structure,

wherein the delivery system is adapted to be positioned with the two inlet ports outside of the patient while the outlet port opens into the puncture and the occlusive element seals the vessel lumen.

11. (Previously Presented) The kit of claim 10, wherein the first material comprises at least two functional groups chosen from the group consisting of amines and thiols, and the second material comprises polyethylene glycol and having at least two groups that demonstrate covalent bonding activity with the functional groups of the first material.